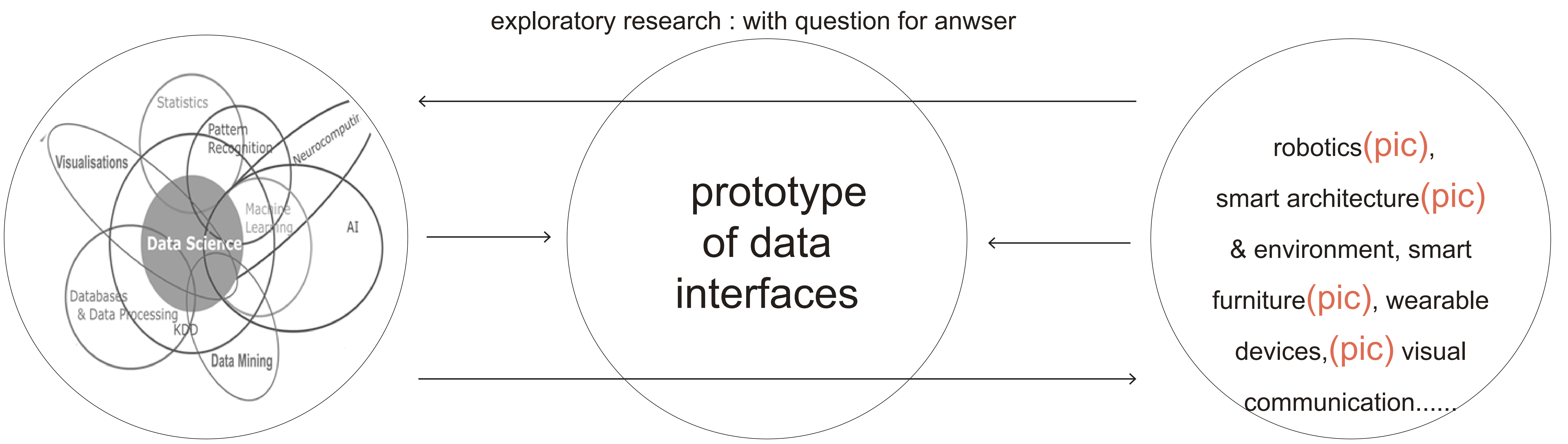
Data Interface Studio

base on the background above, and data theory.

The create of the basic interfaces is essential for both of explore the theory of data science and embody them to the application field.
Without physical interfaces the huge capacity of the data science can not be applied and be tested in reality.



exploratory research : with question for anwser

prototype
of data
interfaces

robotics(pic),
smart architecture(pic)
& environment, smart
furniture(pic), wearable
devices,(pic) visual
communication......

validation empirical reseach: with anwser for question

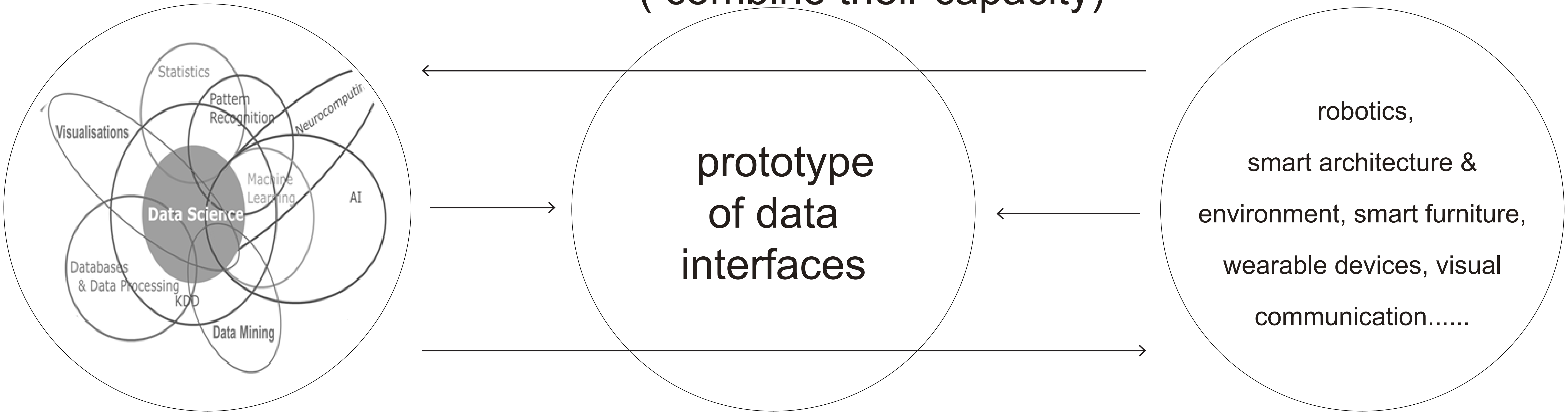
data scientist
with anwser for
more answer

designers with
question
for more question

how it works.

cooperation:

to finish the prototype
(combine their capacity)



prototype
of data
interfaces

robotics,

smart architecture &

environment, smart furniture,

wearable devices, visual

communication......

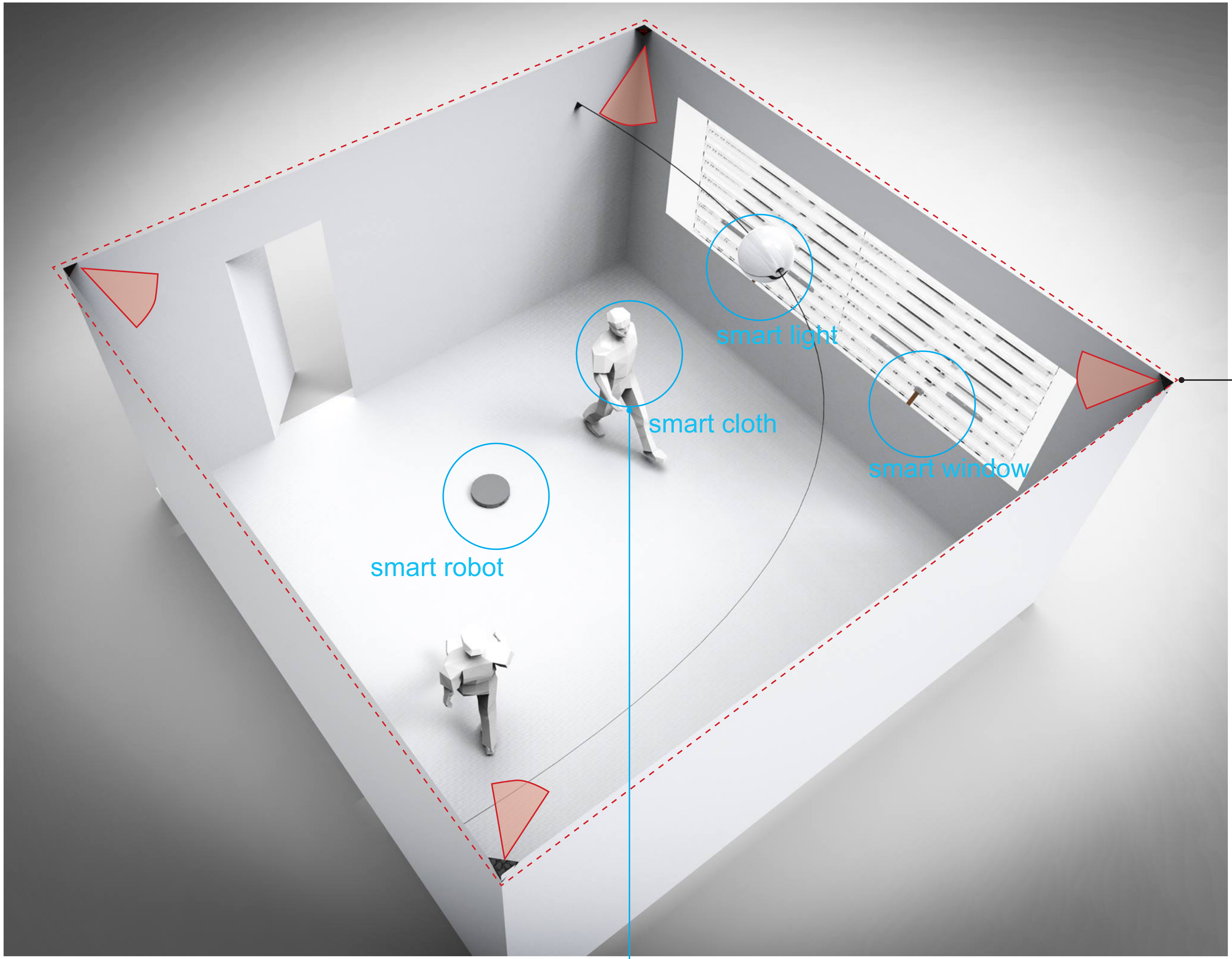
data scientist
provide coding, mathimatics,
sensor technology

simple coding and asembly of the sensor devices,
mechanism(pic), create 3d modle(pic) of the device.

(pic)fabrication of the prototype, the technology of making ,
research of material,

graphic design, video making skill,(pic)
to express

space data interface



mobile device: smart cloth, smart kinetic light, smart window, home robot.
data input: body data, location data.
data output: ....

relavent research:
processing of big data
machine learning......

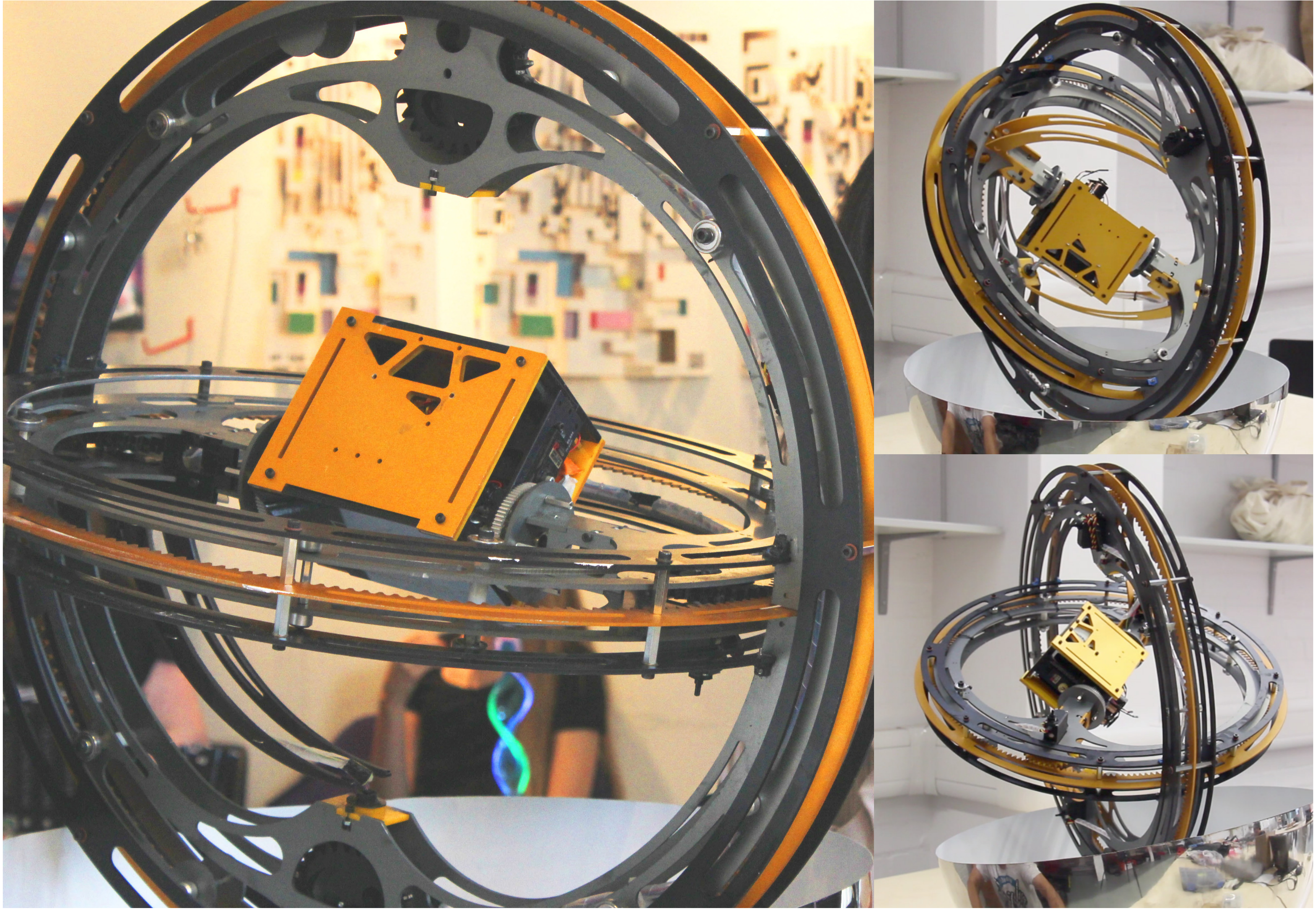
high speed data transport

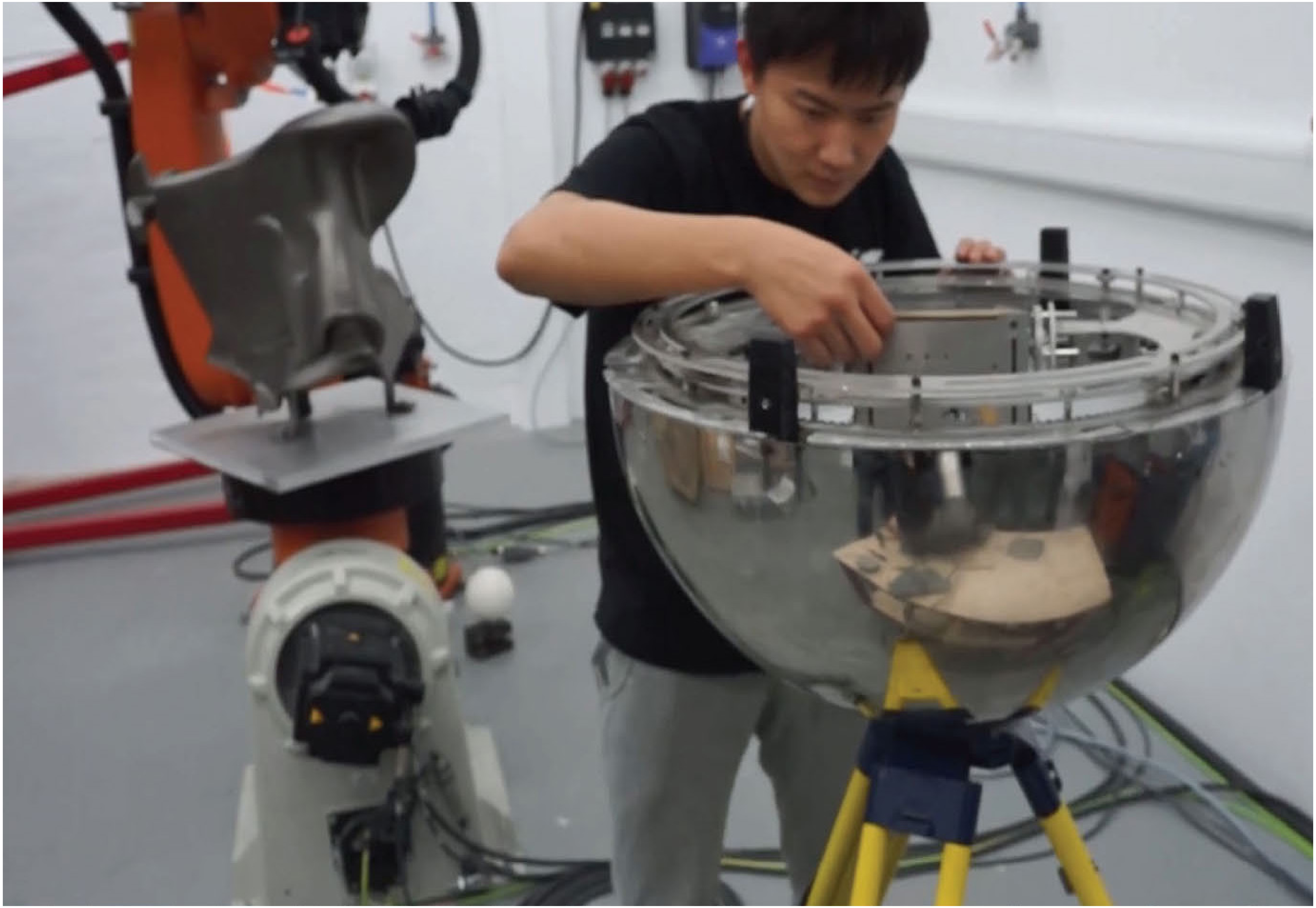
clude computing

space data system:
stable device
data input:
1 light
2 sound
3 temperture
4 huminity
5 wind
6 movement of human in space

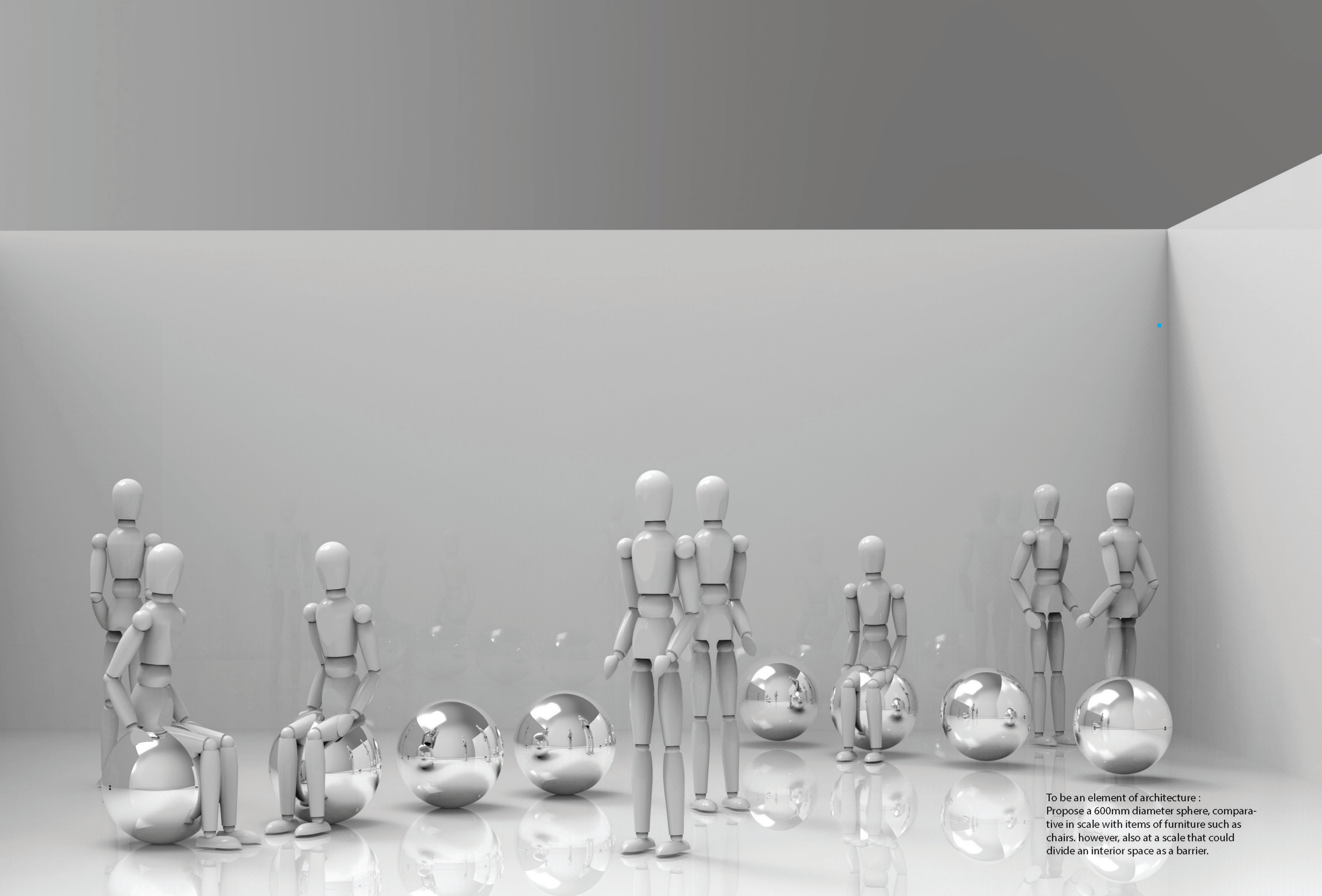
data outout:
1. control of the smart mobile devices.

“1st Element” showing in Kinetic Art Fair 2014 London.



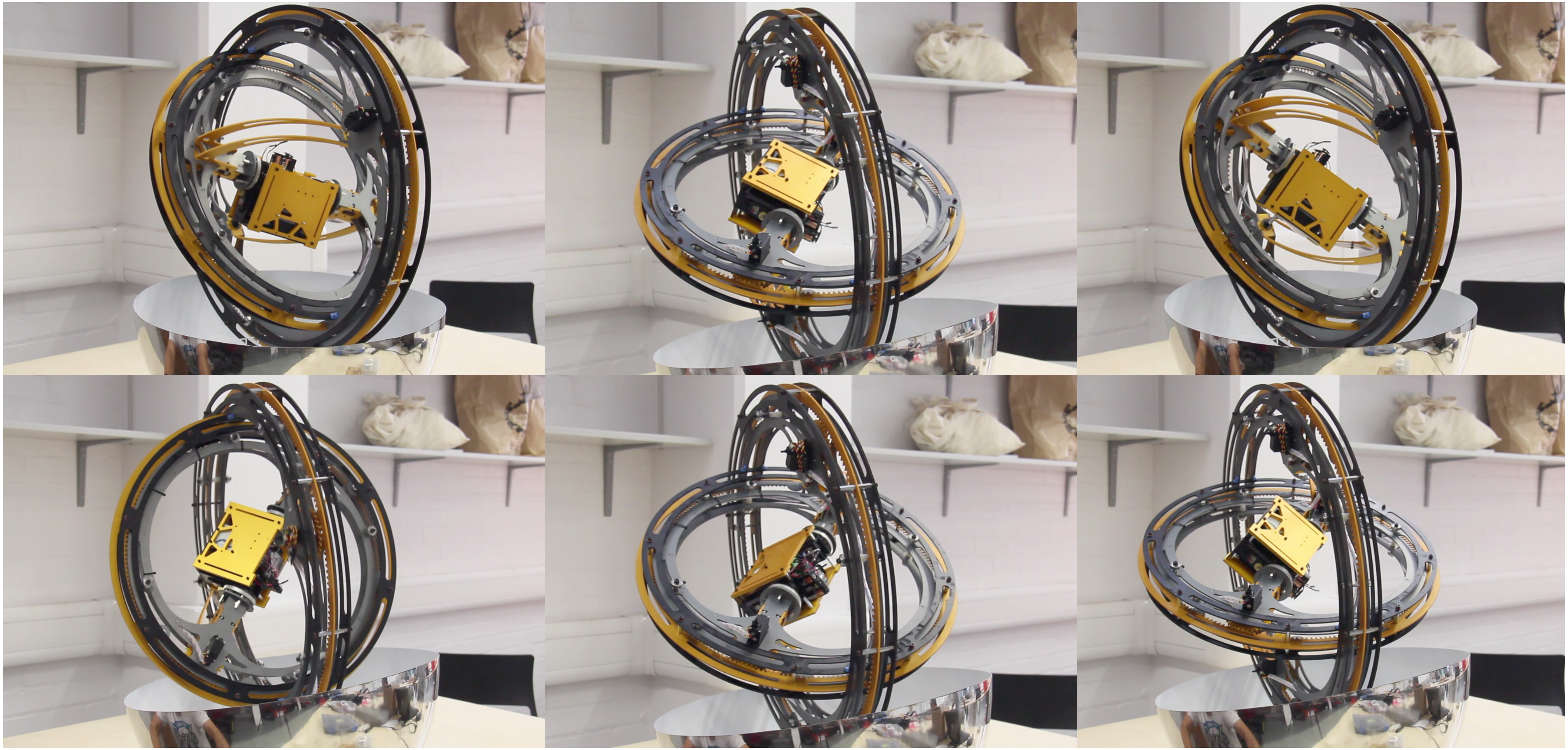


ANTHROPOMORPHIC SCALE (600MM)

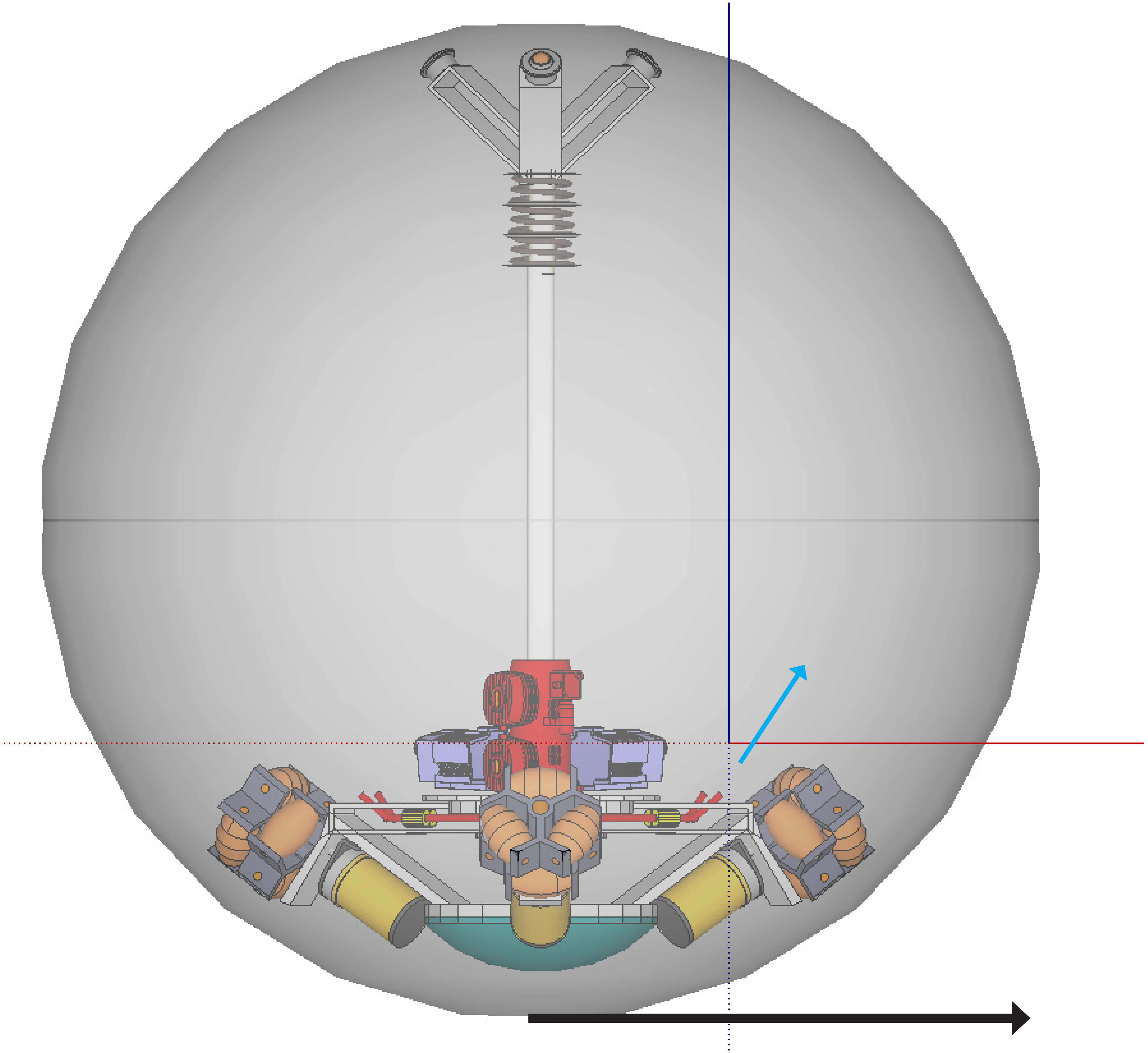


To be an element of architecture :
Propose a 600mm diameter sphere, comparative in scale with items of furniture such as chairs. however, also at a scale that could divide an interior space as a barrier.

First 3-axises movement been captured in classroom



the key to increase the speed and keep its flexbility

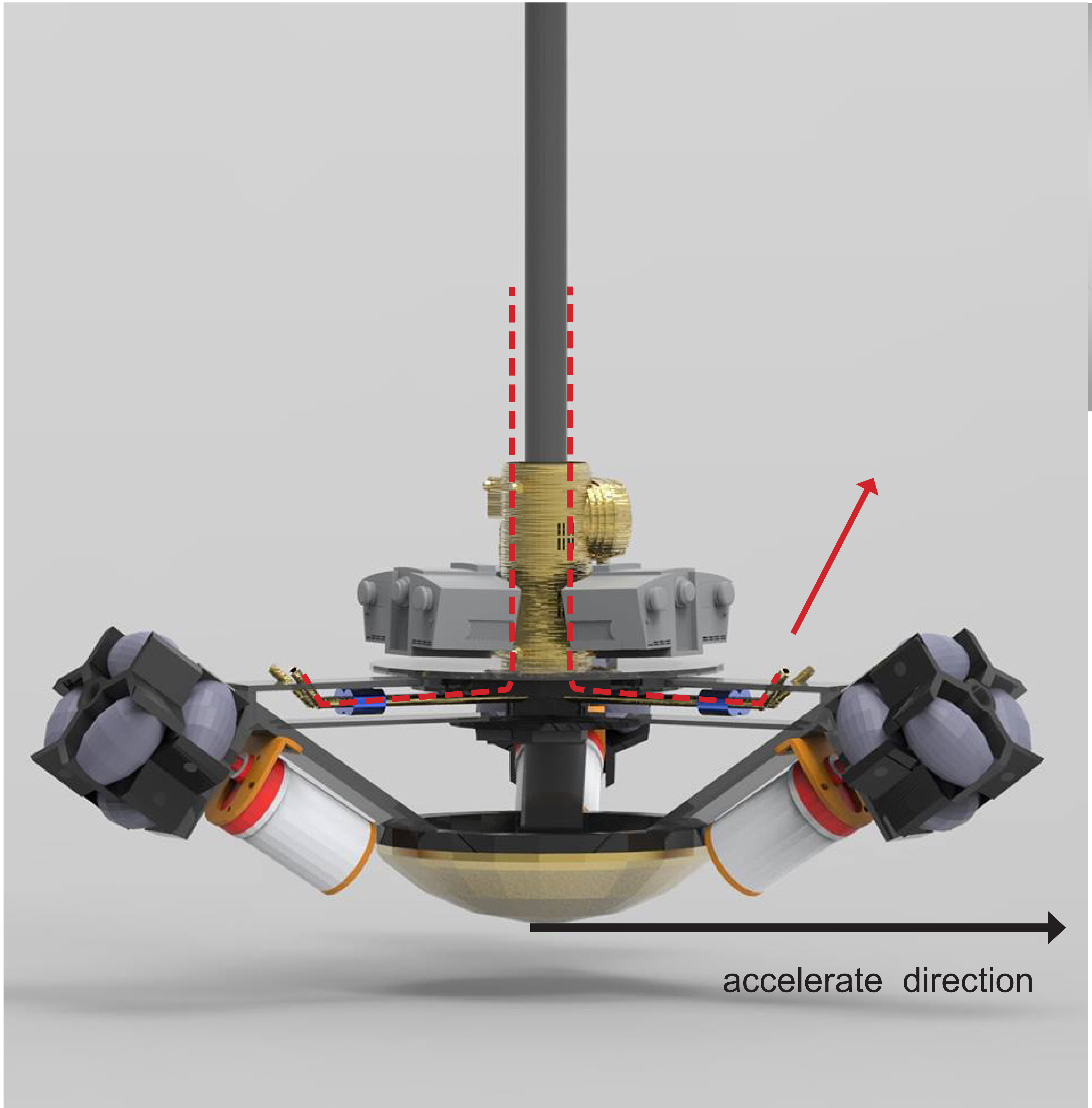


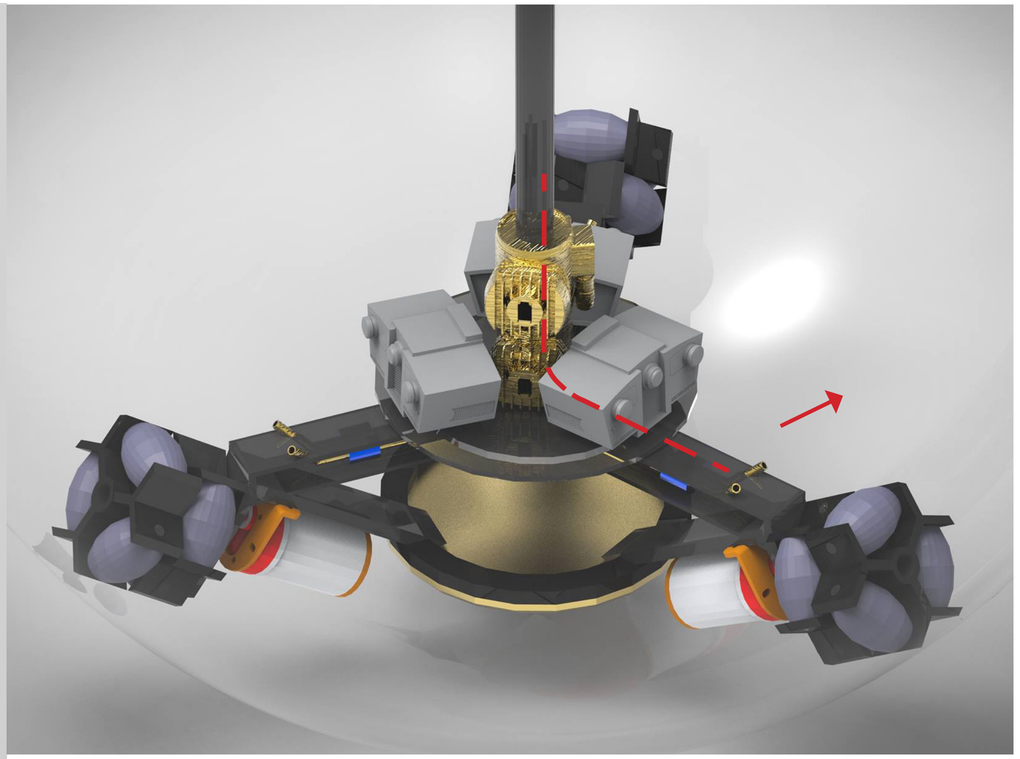
accelerate direction

the key is to keep the inside part in same position.
when it in high acceleration.

advantages:
1good for the sensorson it to collect data
2 good for the direction control of the robot

HOW IT WORKS.

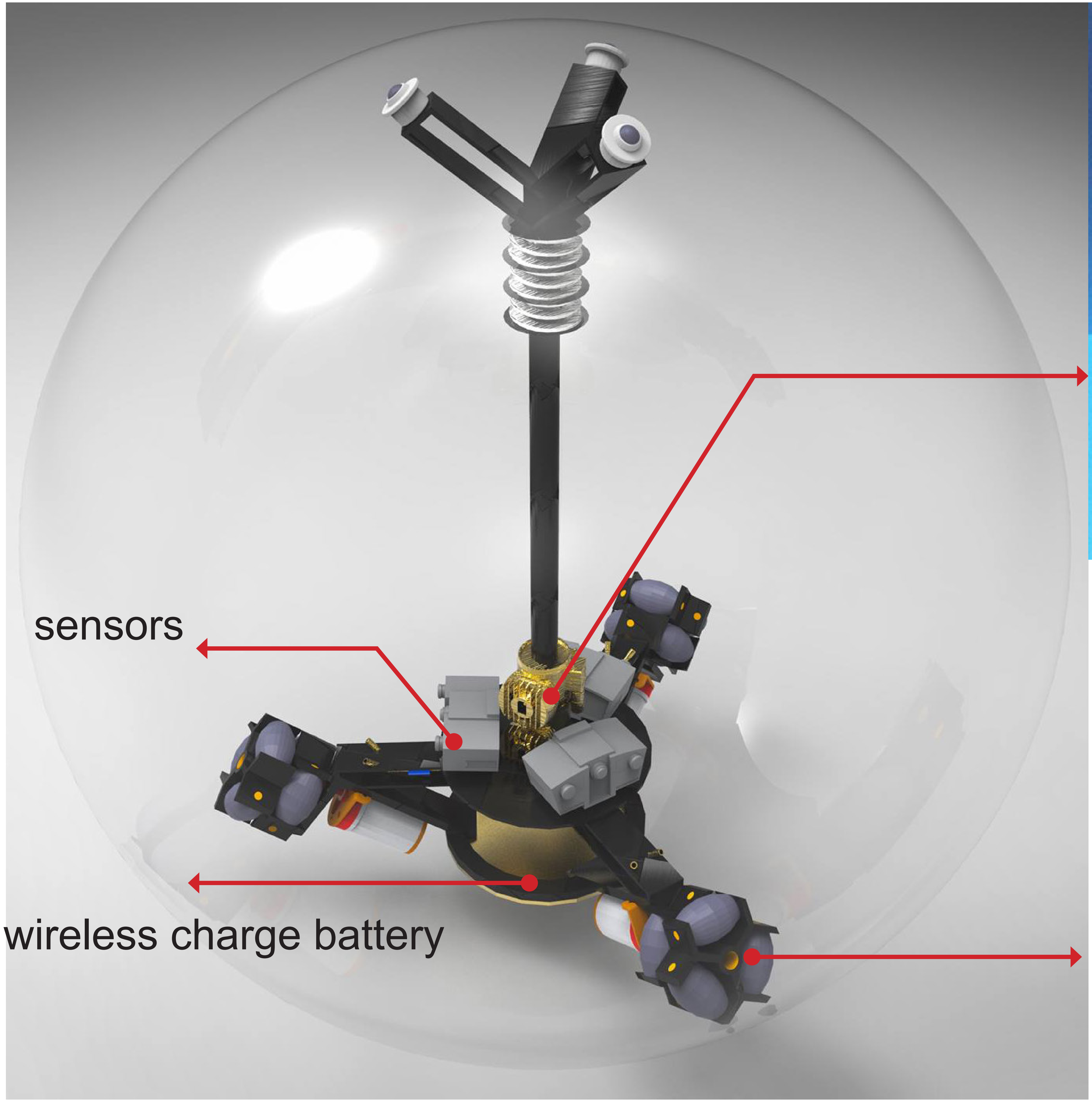


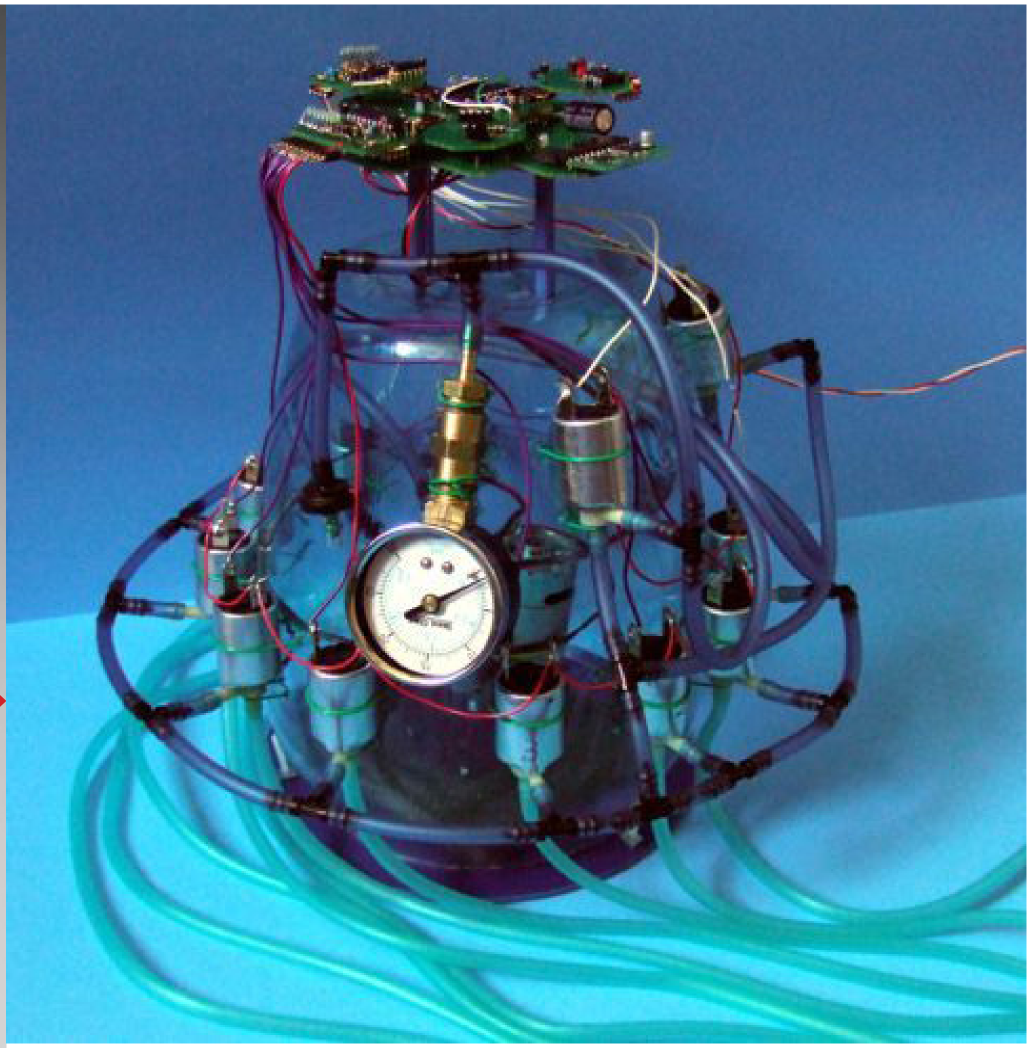


use the compassor air to keep the inside core in same position. with the high speed motor , it has the potential to

reach 45 Km/h.

THE NEW PROTOTYPE (balance control and direction control work sperately)

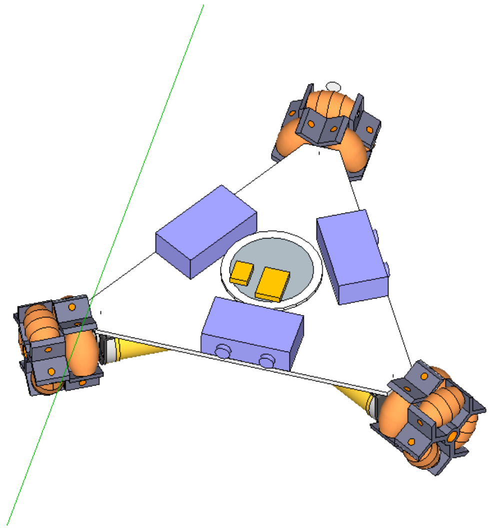




air compressor system

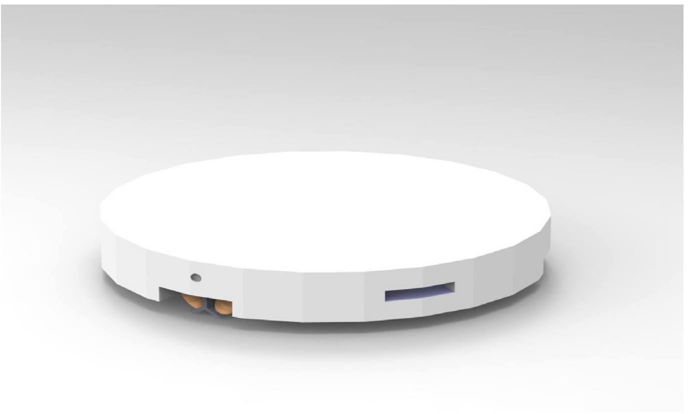
omni wheel robot

work steps and challenges.



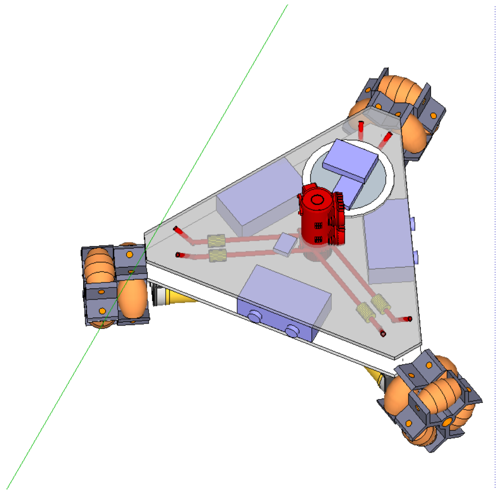
step1: make the omni robot acheive 15km/h

step2: make it can avoid human.

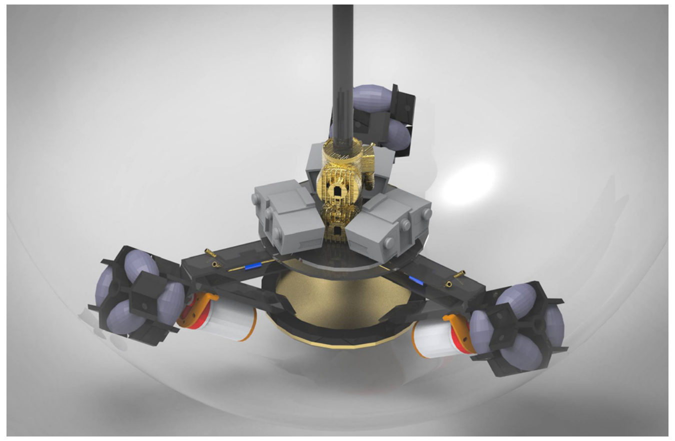


chanllenge :
software: high speed data processing

hardware: fiction of omni-wheel.



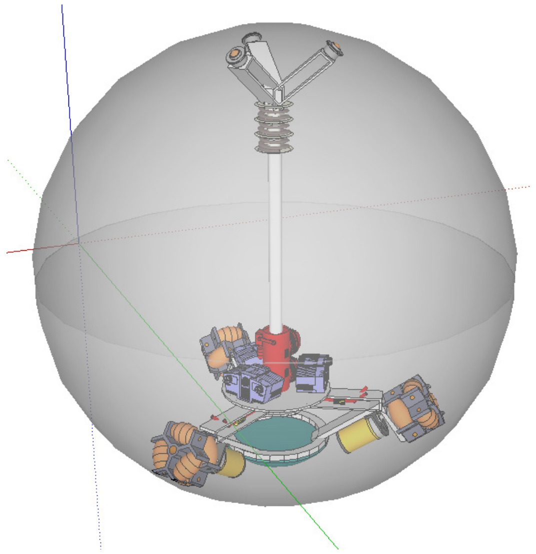
step3: make the air compressor work with omni robot. to keep its balance in ball



chanllenge :

software: control model of the robot.

hardware: power of the compassor.



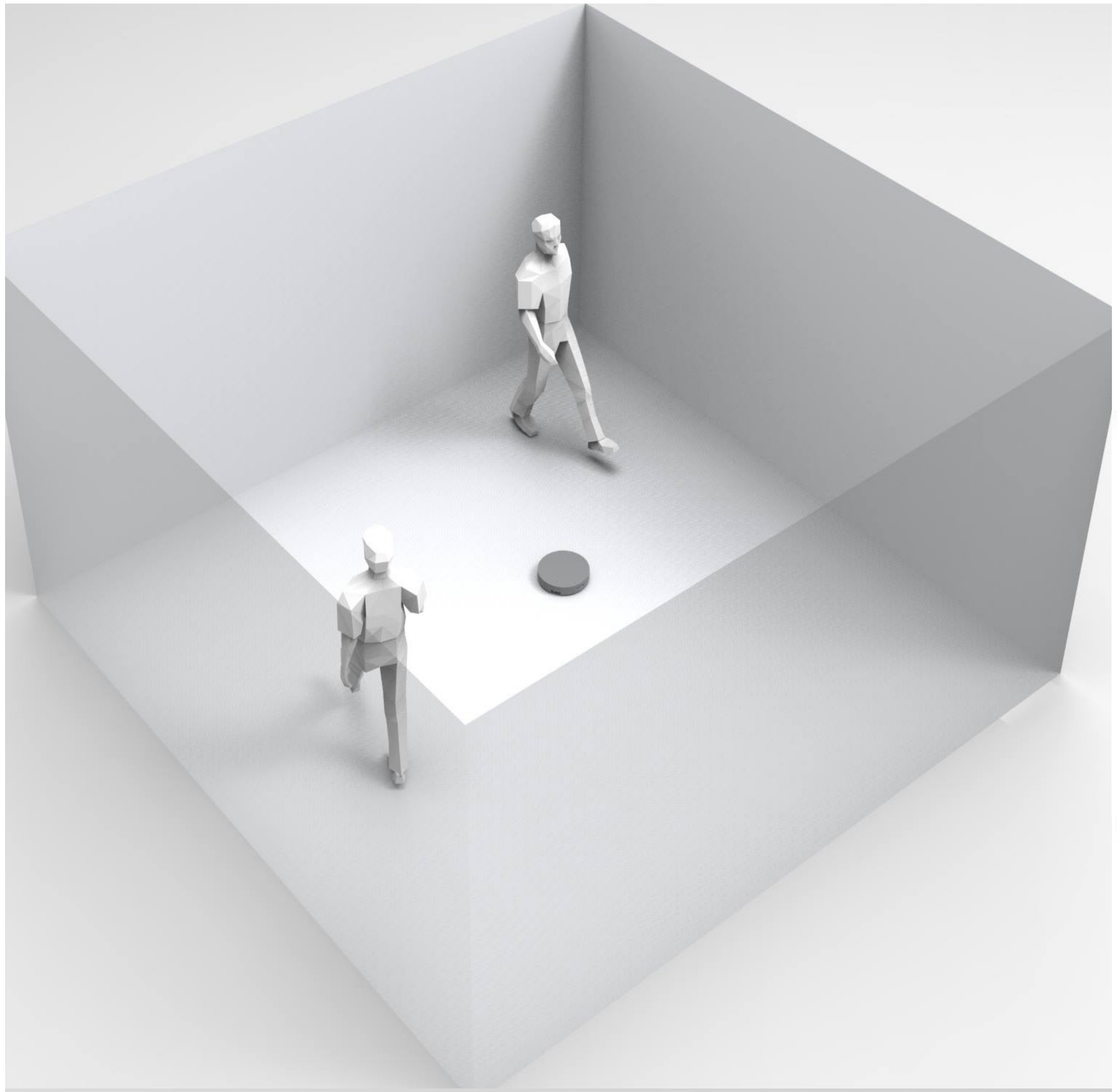
step4: test in ball, to acheive 45km/h

chanllenge :

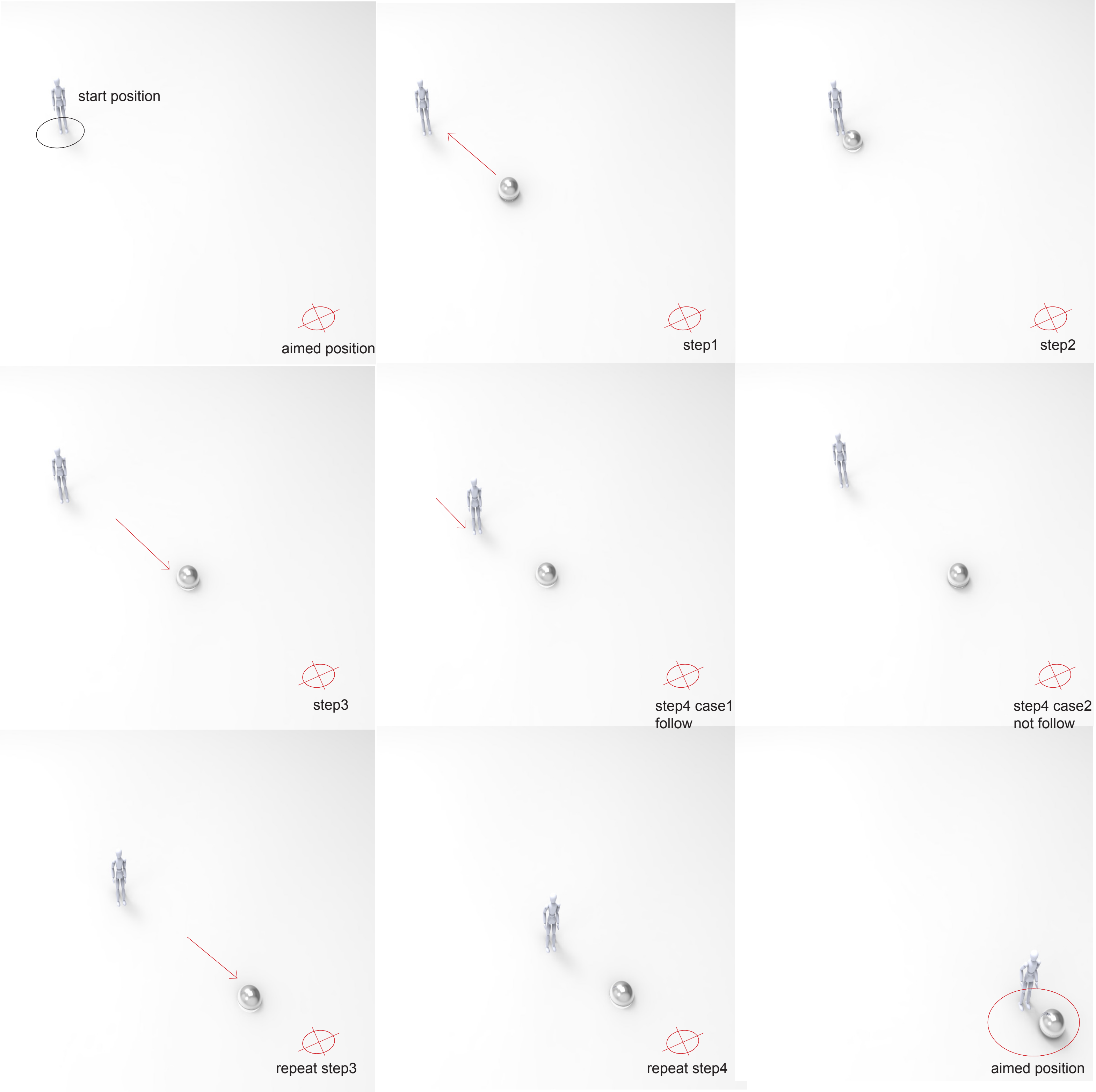
hardware: fiction of outside sphere.

and inside sphere.

work step1 and potential application :exercise in gym

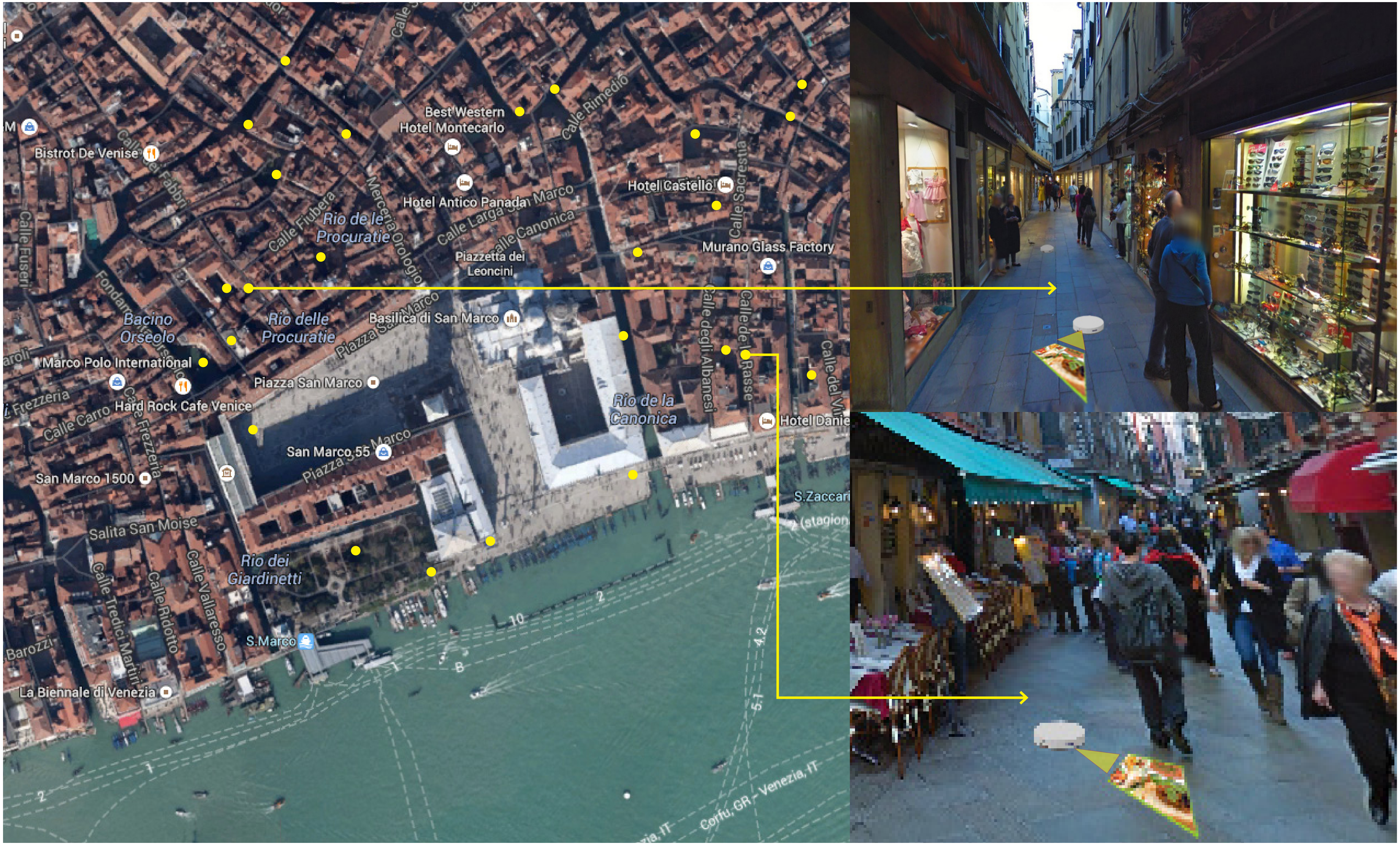


30 km/H speed and can avoid people.

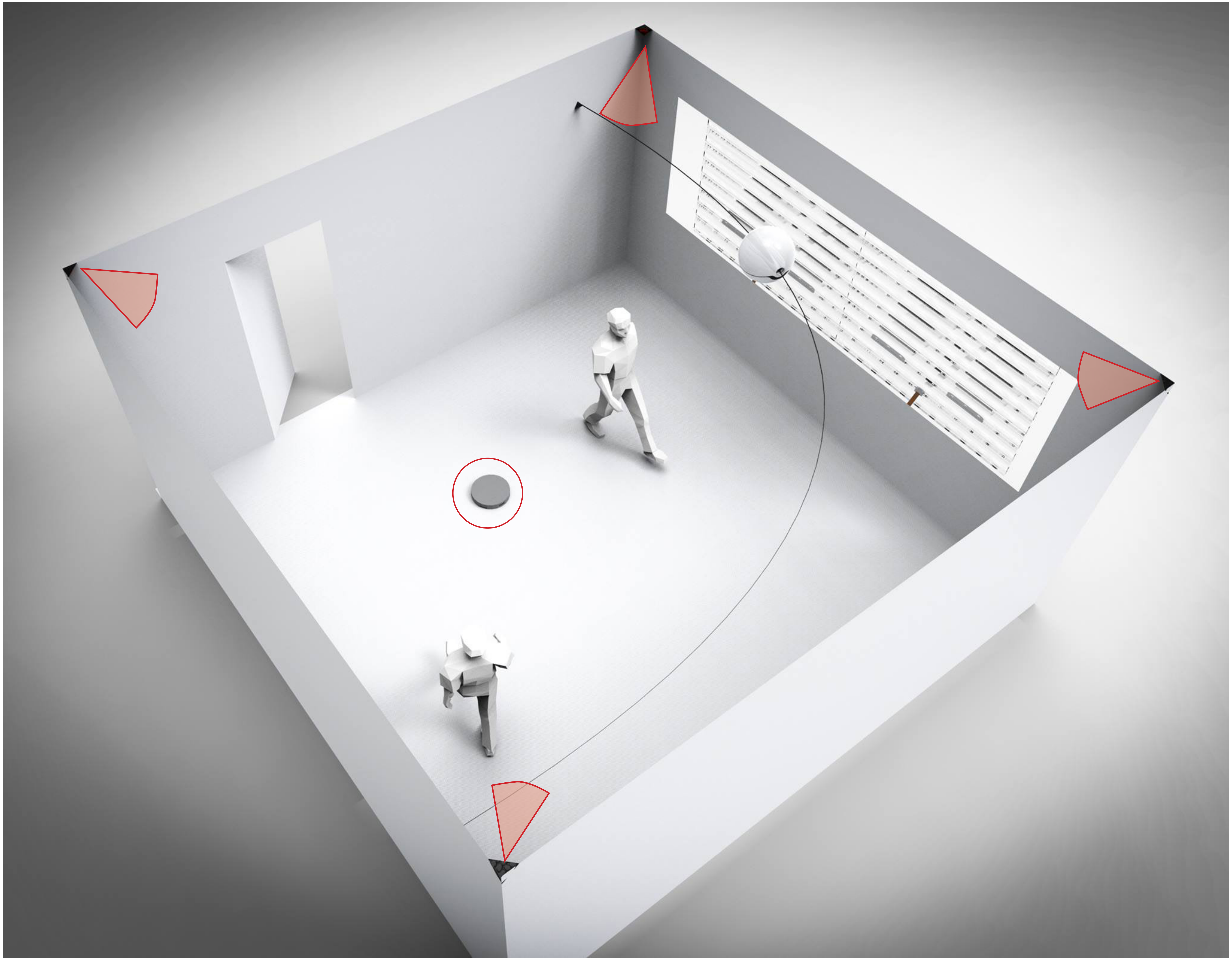


based on game theory.

work step1 and potential application : advertizing for retail



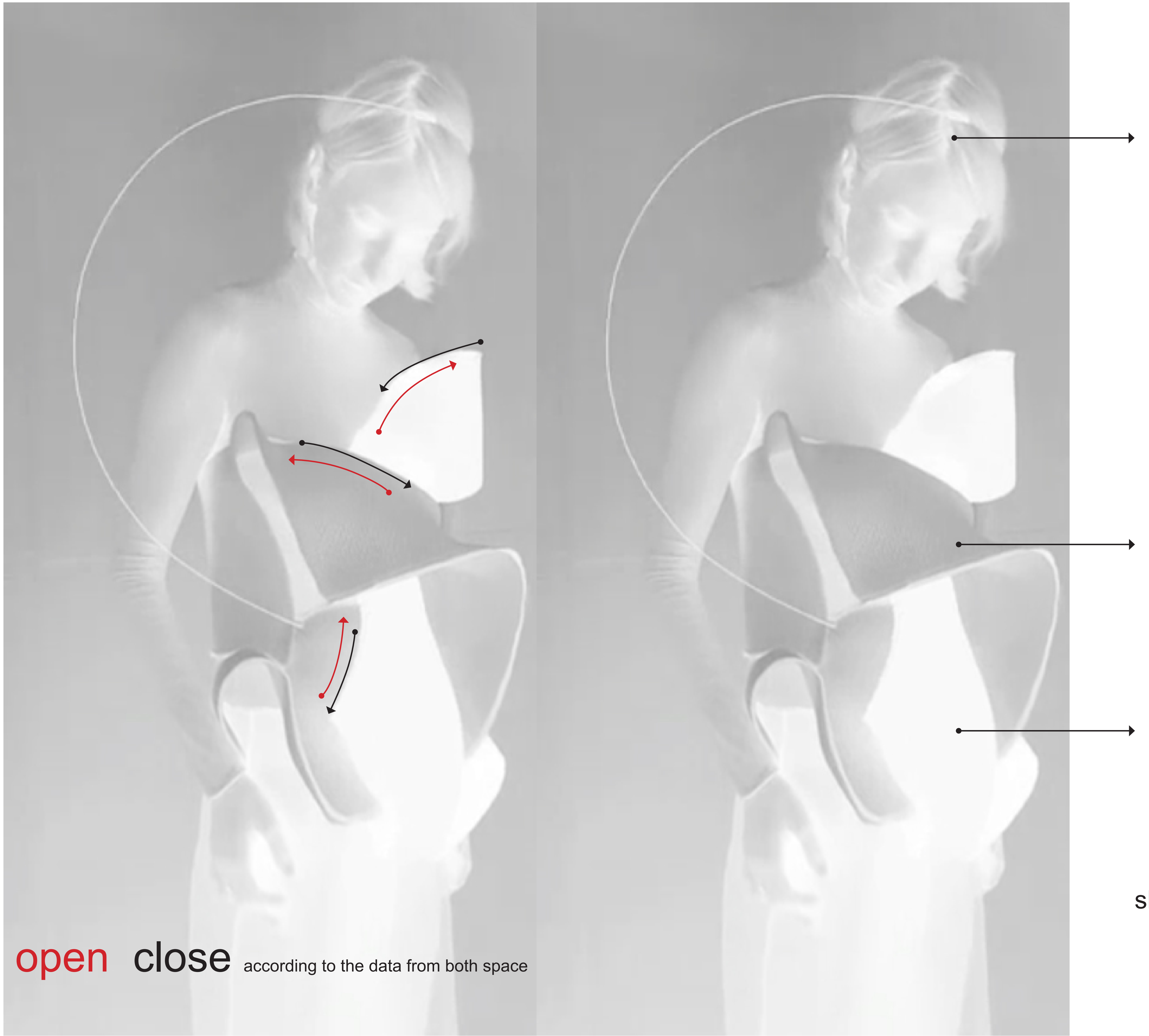
performance in “data space”



in the data space, it only need a reciever instead of sensor and mircocontroller.

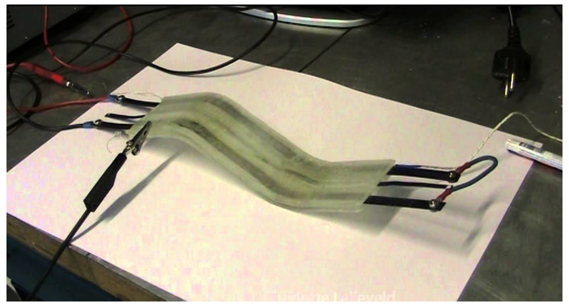
adaptive cloth

FANG YI TAN

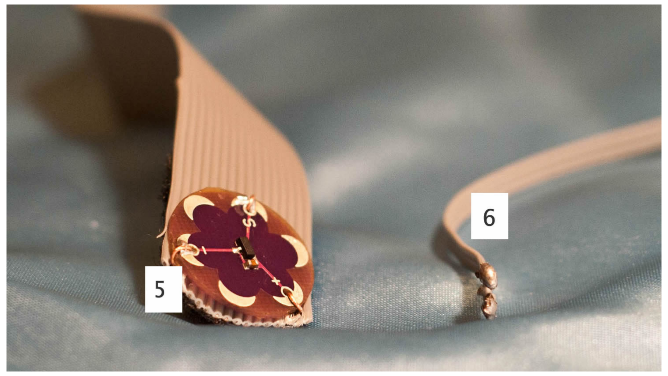


open close according to the data from both space

EEG



Shape Changing Materials

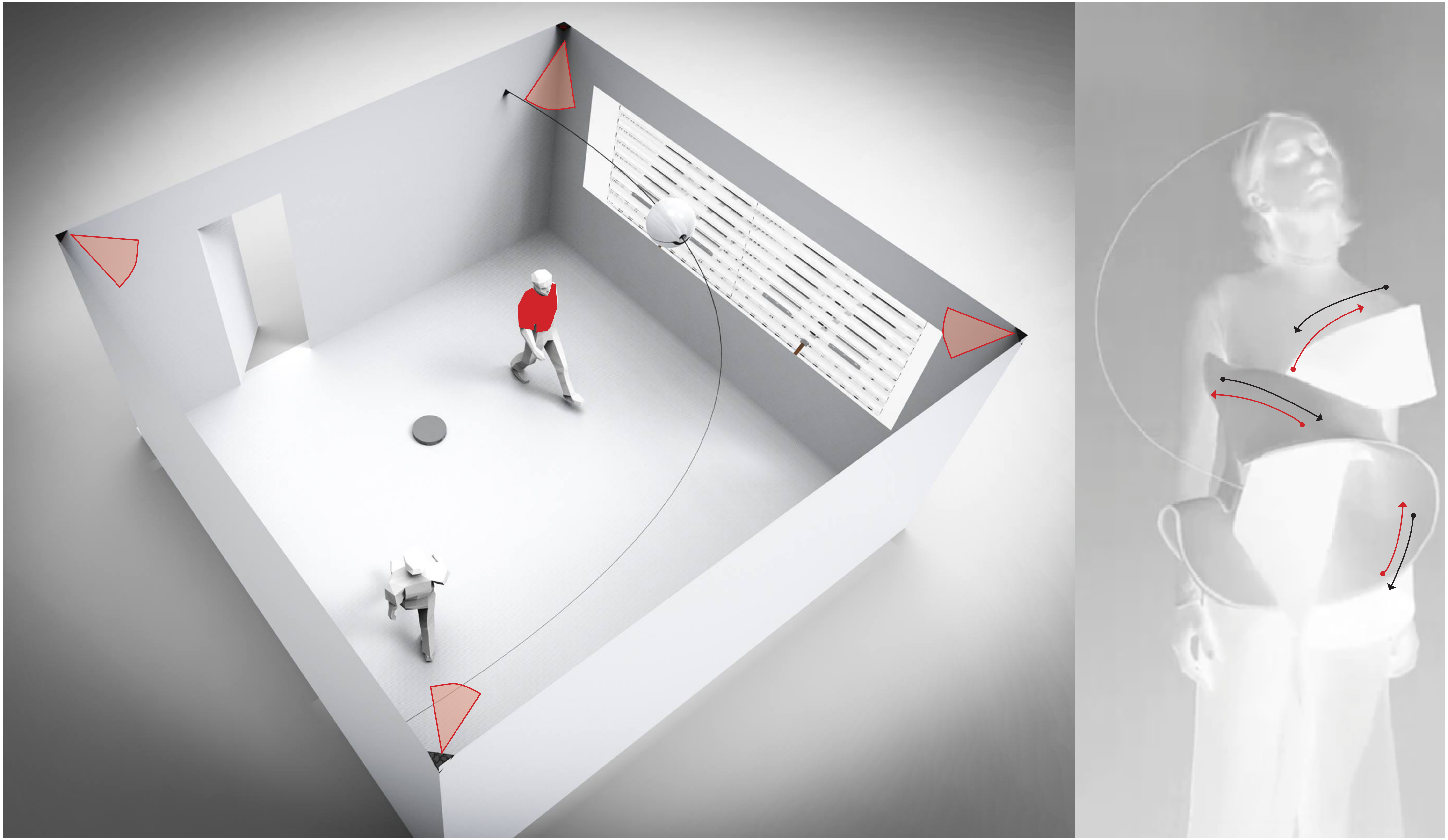


skin humidity temperature sensor

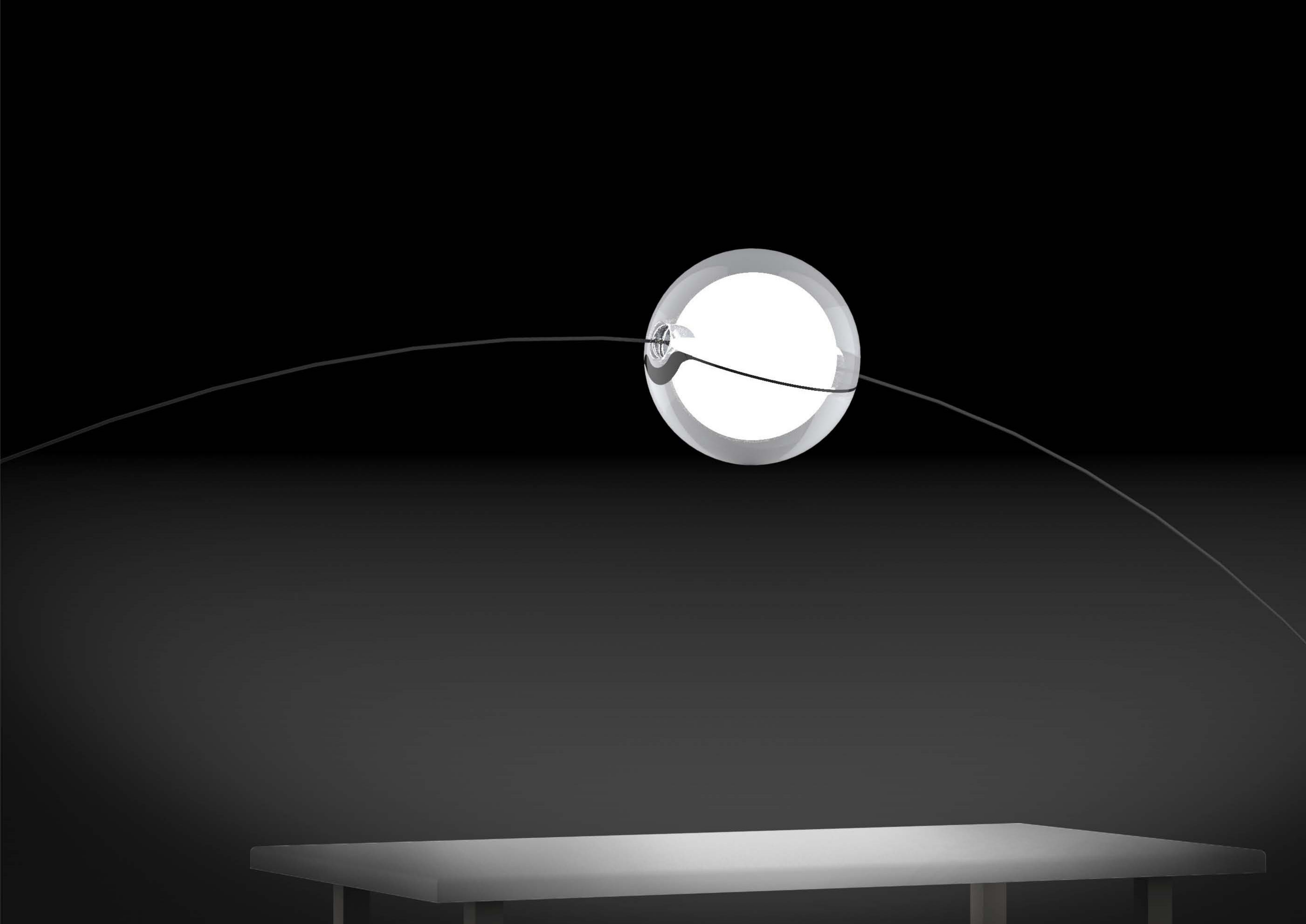
body and mind.

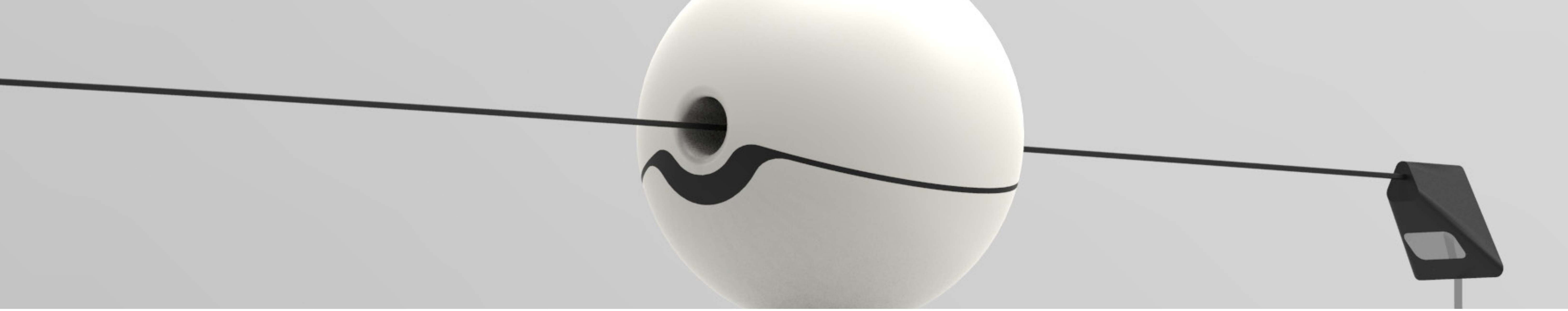
performance

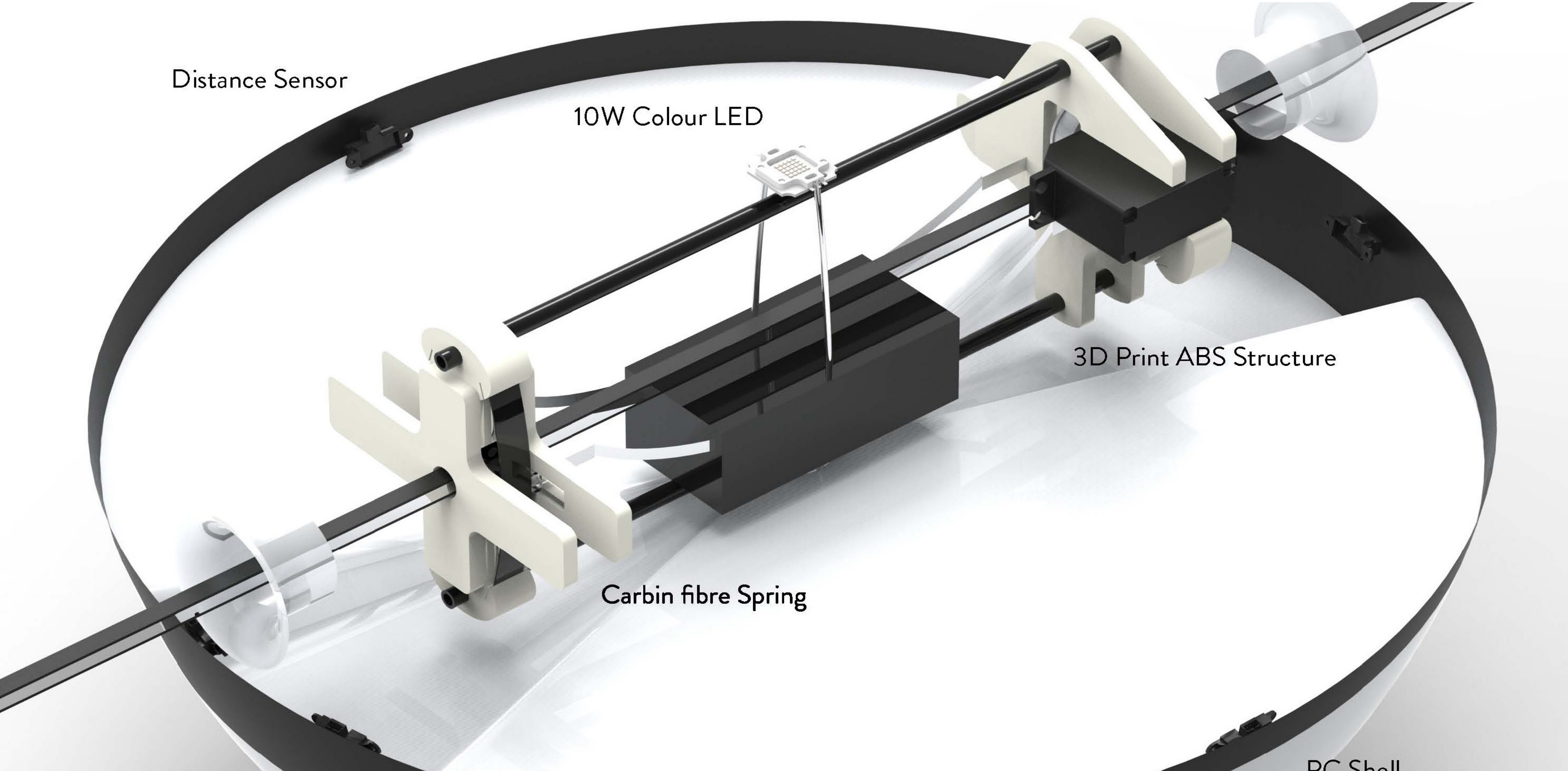
performance in “data space”

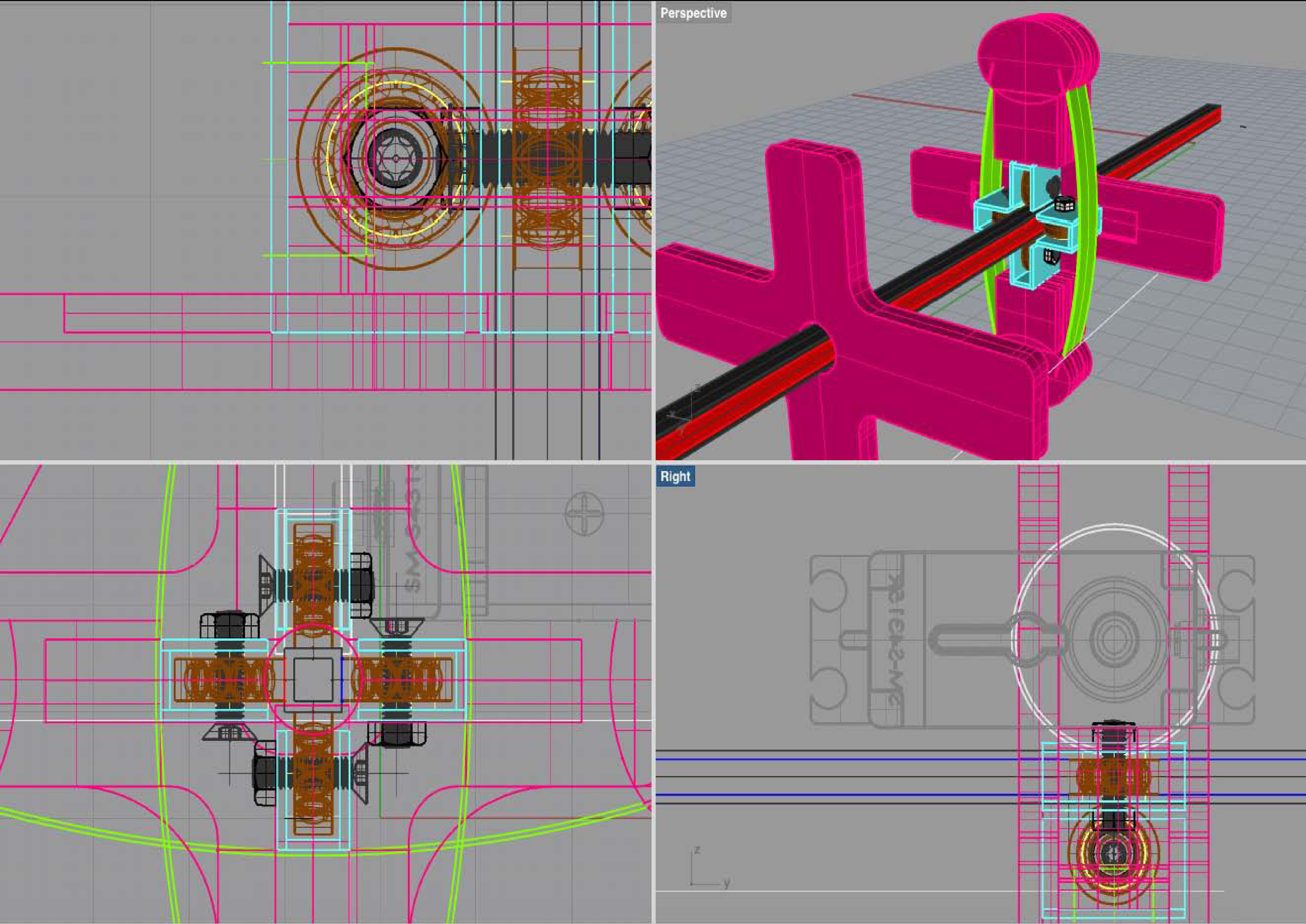


with the movement data provide by space sensor , when you move fast, the cloth change its shape to make it suitable for movement.
with the study of the multiply data of body(heart beat, skin huminity) and space (temperature , light, movement......), make the cloth more adaptive .

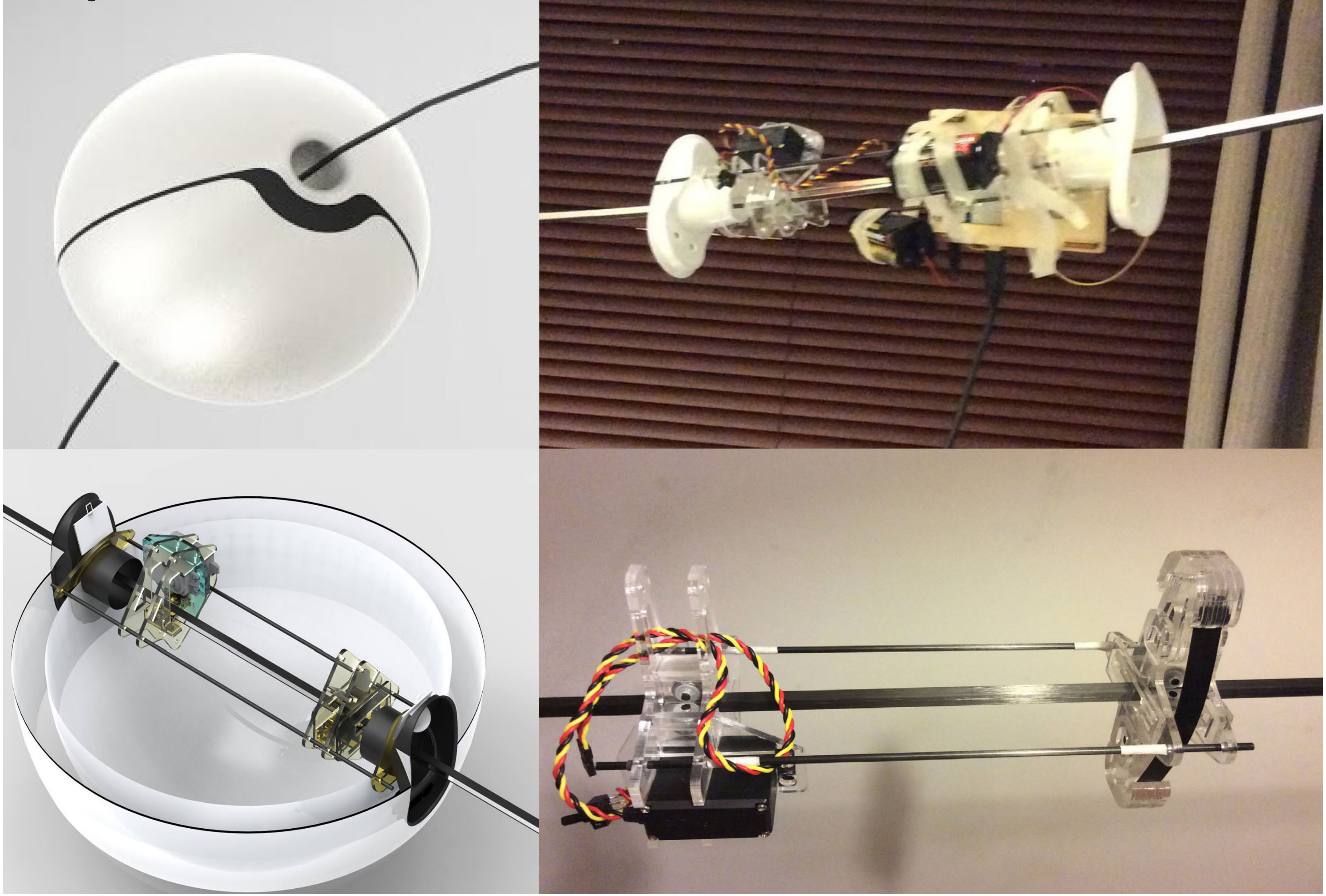





Distance Sensor
10W Colour LED
3D Print ABS Structure
Carbin fibre Spring
PC Shell


Perspective
Right
z
y

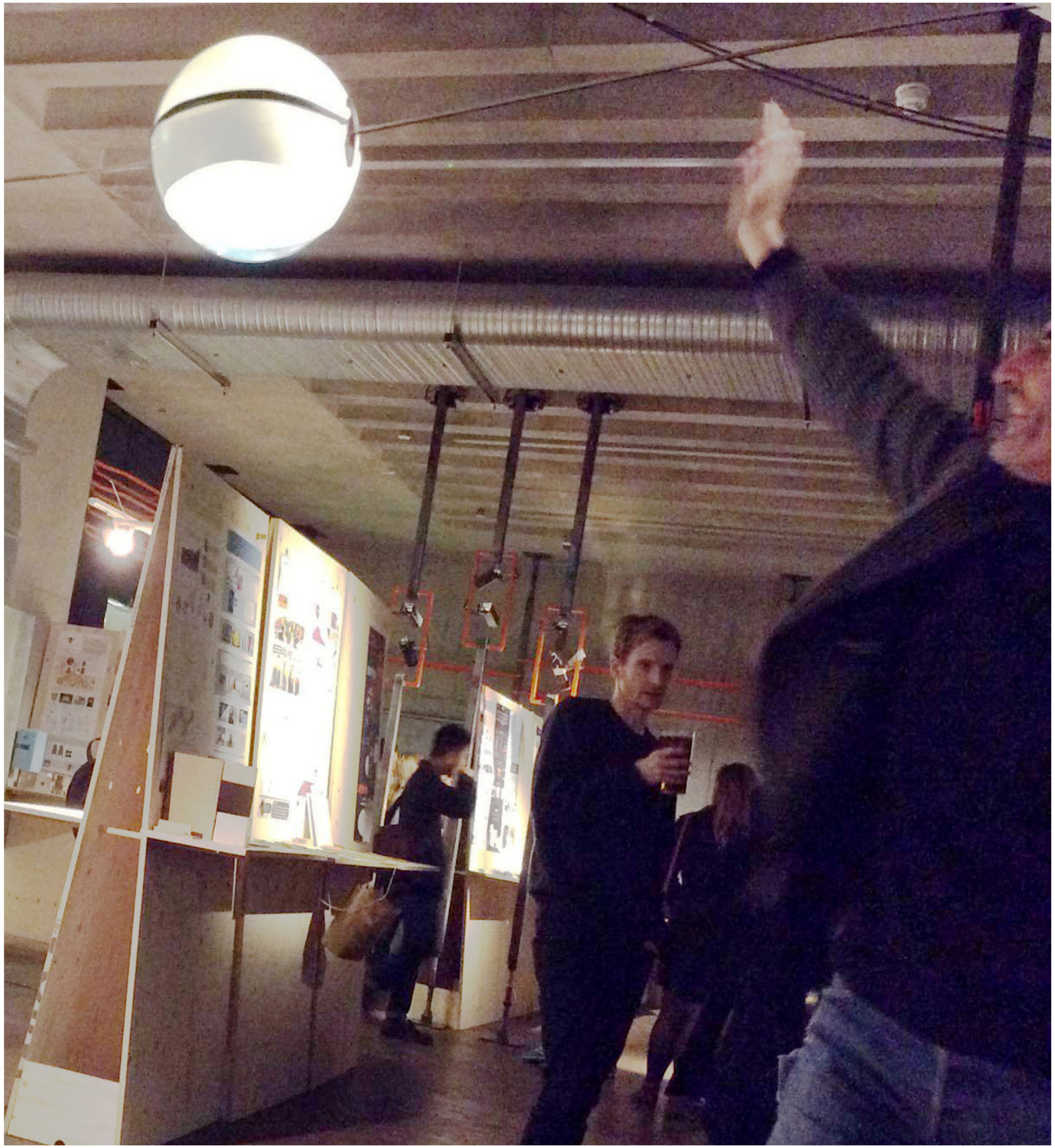
Vsion Light



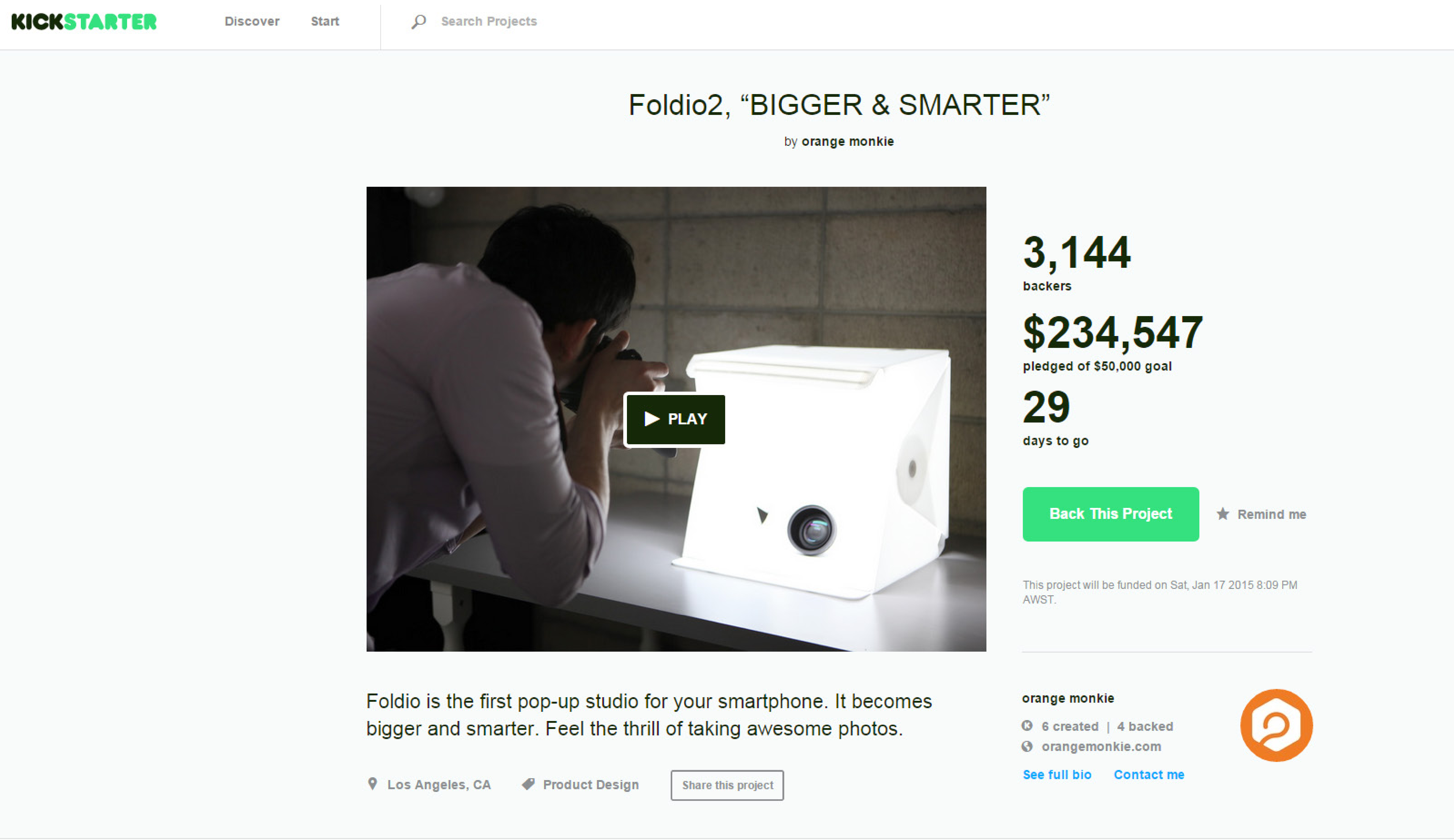
"Vision Light" Project (after graduate from Bartlett)

In this project(Working with Yu Harlan,I finished the software, adruino based hardware , and the kinetic servo based mechanism inside).

It is a round kinetic light which can moving towards you by detect your position and movement automatically. So it becomes an assistant but not only a tool for you. It was exhibited in UAL in Dec 3. Everyone likes it.



Talking Things



KICKSTARTER Discover Start Search Projects

Foldio2, “BIGGER & SMARTER”

by **orange monkie**

3,144
backers

$234,547
pledged of $50,000 goal

29
days to go

Back This Project ★ Remind me

This project will be funded on Sat, Jan 17 2015 8:09 PM AWST.

Foldio is the first pop-up studio for your smartphone. It becomes bigger and smarter. Feel the thrill of taking awesome photos.

Los Angeles, CA Product Design Share this project

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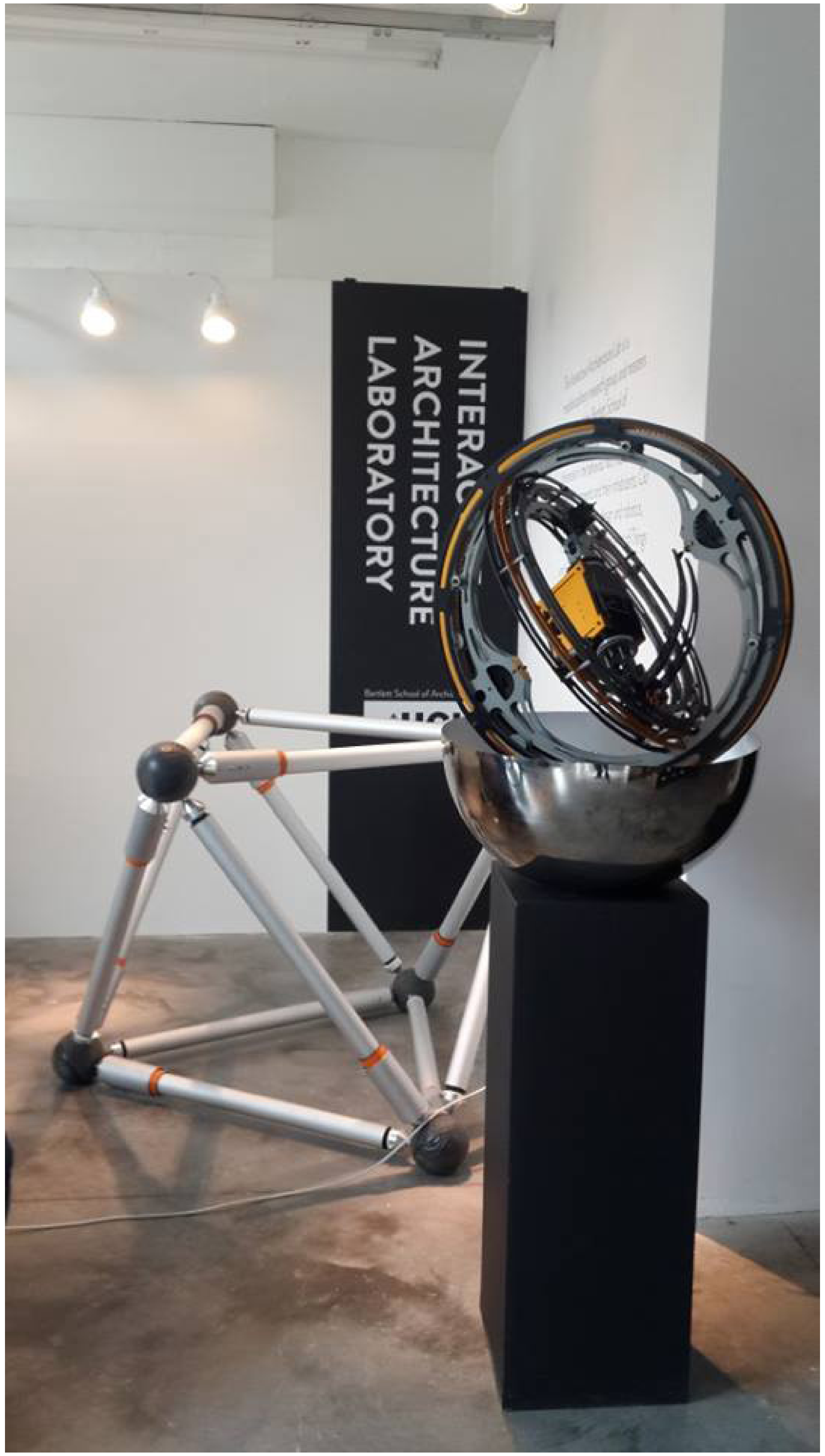
See full bio Contact me

Media



Video of Project:
(Prototype 4 shown in UCL Quad) https://www.youtube.com/watch?v=yOC1OB90AOk
(Design and Animation) http://youtu.be/53RNcsAwLEk
(In Kinetic Art Fair 2014) http://youtu.be/TQ7BNy6ORIc

sto

werkstatt

JASON
BRUGES
STUDIO

KINETICA
ART
FAIR
2014

alma-nac

collaborative architecture

cinimod
studio

Awards

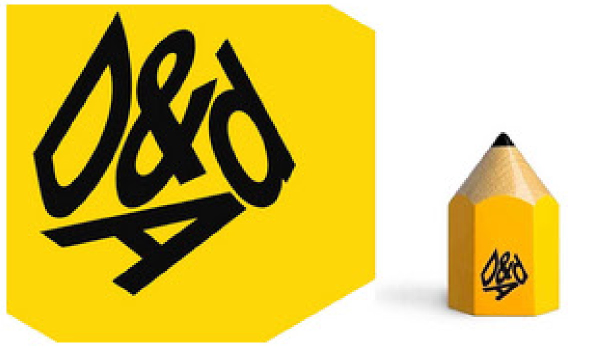
http://electroluxdesignlab.com/2014/submission/future-hunter-gatherer/

Design Lab 2014
, Turkey
Design Lab '14

MARTINI

PHOTO
OF THE WEEK
2014 SPRING

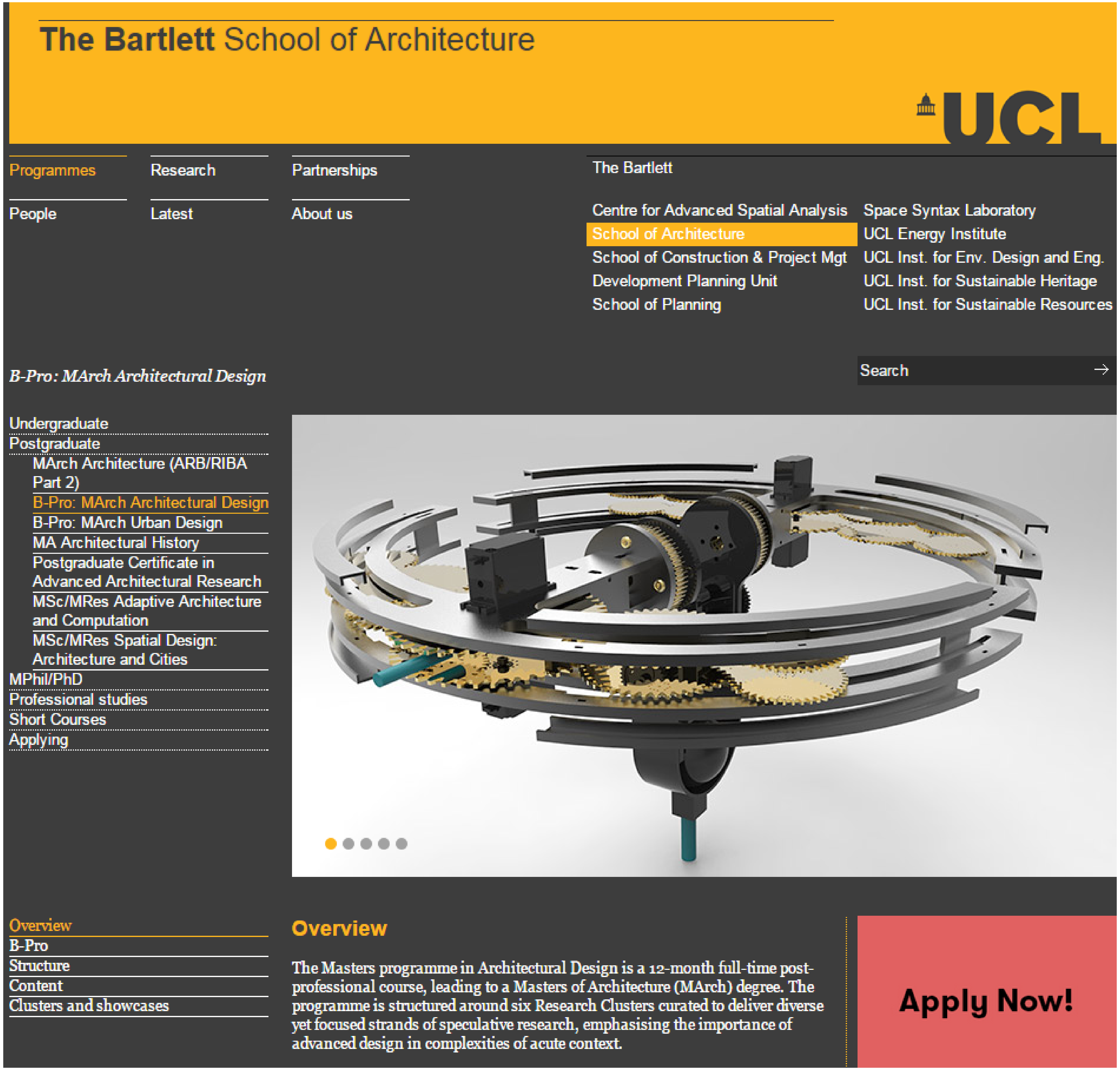
MilanTravel
Bursary
Studio info
Research


D&AD

bruni glass

AGA

PHOTO
OF THE WEEK
2013 ANNUAL



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The Masters programme in Architectural Design is a 12-month full-time post-professional course, leading to a Masters of Architecture (MArch) degree. The programme is structured around six Research Clusters curated to deliver diverse yet focused strands of speculative research, emphasising the importance of advanced design in complexities of acute context.

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